

Quick Start Guide

MAC Operating System Built-In Accessibility

Overview

The MAC Operating System X has many helpful universal access built-in options for users of varying abilities. In this quickstart, four major areas of access are addressed: Vision, Hearing, Physical and Motor Skills, and Literacy and Learning.

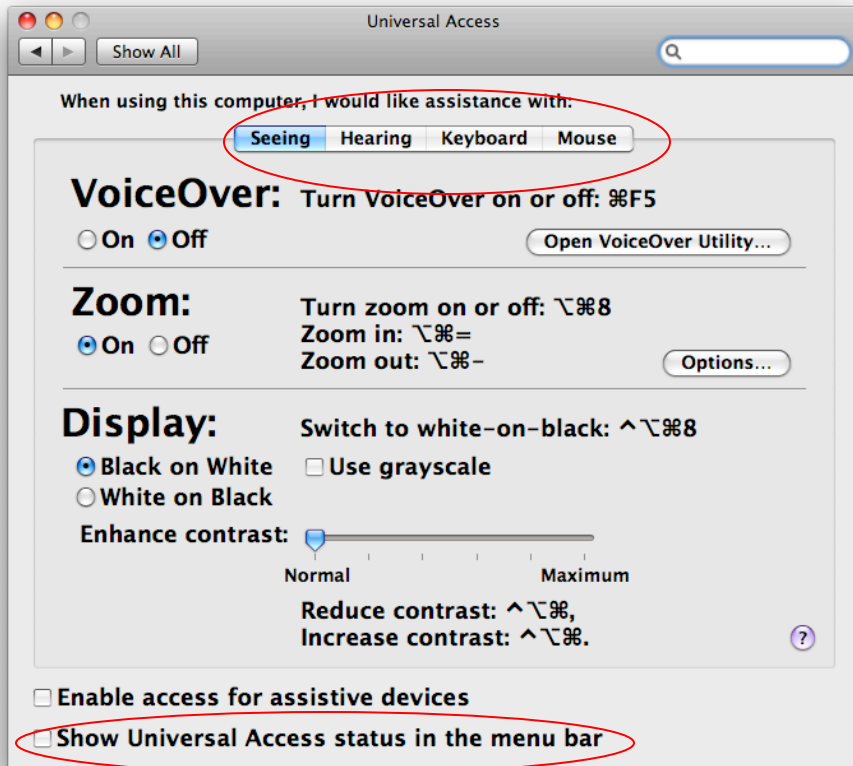
To Use

The accessibility options are located in the **System Preferences**. To open your system preferences, go to **Apple→System Preferences**.

On the System Preferences window that opens, go to the **System** area and select **Universal Access**.



When the Universal Access window opens, make sure that **Show Universal Access status in the menu bar** is enabled.



The Universal Access window opens to the Vision options screen.

You can toggle between four menu items: Seeing, Hearing, Keyboard, and Mouse.

Doing this will open up the various windows for each area of accessibility options.

Some Common Settings

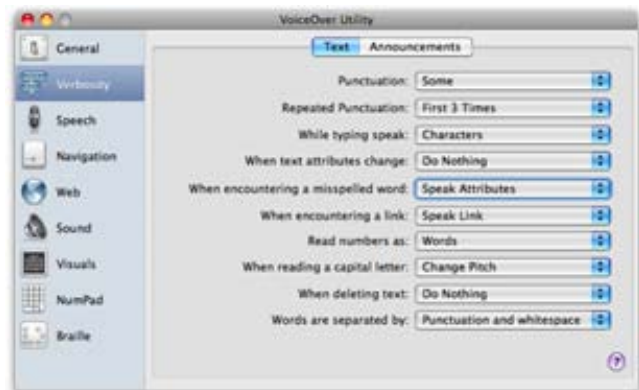
Vision Options

To access vision accessibility options, select the **Seeing** button on the menu bar at the top of the Universal Access window.

The options within the seeing window include VoiceOver, Zoom, and Display.

VoiceOver is a full-featured screen reading tool for the visually impaired. VoiceOver provides full keyboard control of the computer along with spoken audio descriptions.

By selecting the **Open VoiceOver Utility** button, the user can customize the settings. The VoiceOver Utility has nine categories from General to Braille that the user can set depending on his/her preferences.



Zoom allows the user to enlarge the contents of a display at any time Use the Zoom dialog to set maximum and minimum values for instant zooming to a particular magnification.



The user can zoom in or out of the screen display by simply pressing Apple→Control→= or -, respectively.

A preview rectangle outlines the portion of the screen that will be magnified when not zoomed in. The dialog lets you create custom key commands, and it offers three options for cursor tracking when magnified: keeping the cursor in the middle of the screen, automatically moving with the cursor, or moving only when it reaches the edge of the screen.

The **display** options include flexible adjustments for controlling the characteristics of your display. These adjustments are system wide, not application specific, so they provide a consistent view in every Mac application. You can increase or decrease contrast by switching the screen to white-on-black or black-on-white, and you can vary the contrast using a slider control. If you would like to remove all color from the screen, you'll find controls for displaying everything in black and white or grayscale.

Hearing Options

To access options for hearing, select the **Hearing** button on the menu bar at the top of the Universal Access window.

The options within the hearing window include turning on a flash on the screen when an alert sound occurs, and raising or lowering the volume.



Keyboard Options

The options for the keyboard use can be accessed by selecting the **Keyboard** button on the Universal Access menu.



Options available on the keyboard menu include **Sticky Keys** and **Slow Keys**.

The **Sticky Keys** option allows the user to press several keys with one hand as a key combination, for example: Shift + letter will produce a capital letter when pressed in sequence. The keyboard holds the shift and letter keys at the same time to allow a user who may have difficulty using both hands on the keyboard to type capital letters. This tool can also be used for

various key combinations.

The **Slow Keys** option ignores repetitive strokes of a key when an individual with fine motor issues is typing a document. This option puts a delay between when a key is pressed and when it is accepted. The user can select the amount of acceptance delay for when the keys are pressed, as well as having the pressed key make a clicking sound when accepted.

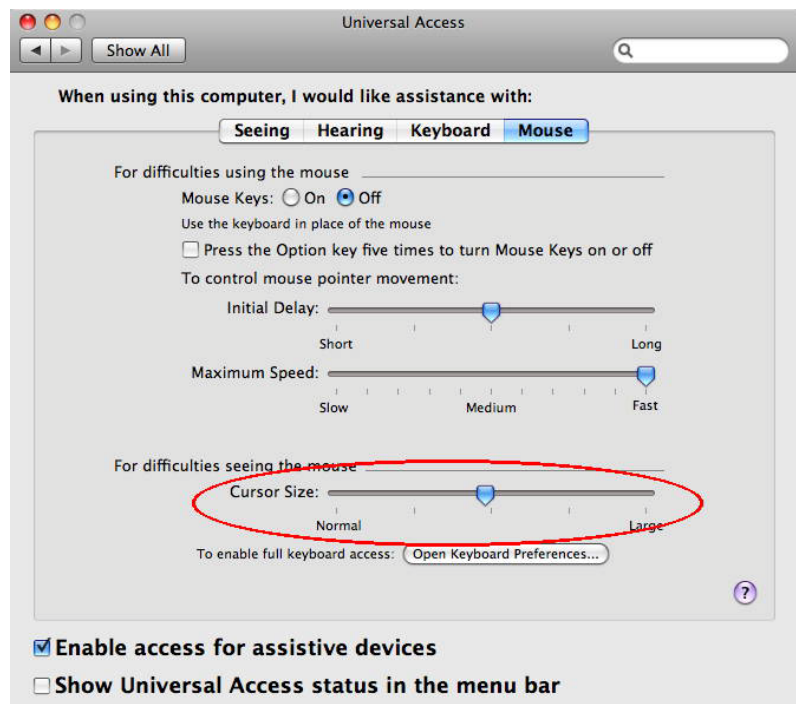
Mouse Options

The options for mouse use can be accessed by selecting the **Mouse** button on the Universal Access menu.

Options available on the mouse menu include Mouse Keys, mouse pointer movement settings, and cursor size.

The **Mouse Keys** option allows the user to control the mouse pointer with the arrow keys on the keypad instead of using a mouse or other pointing device.

The user can also personally set the speed of the mouse pointer



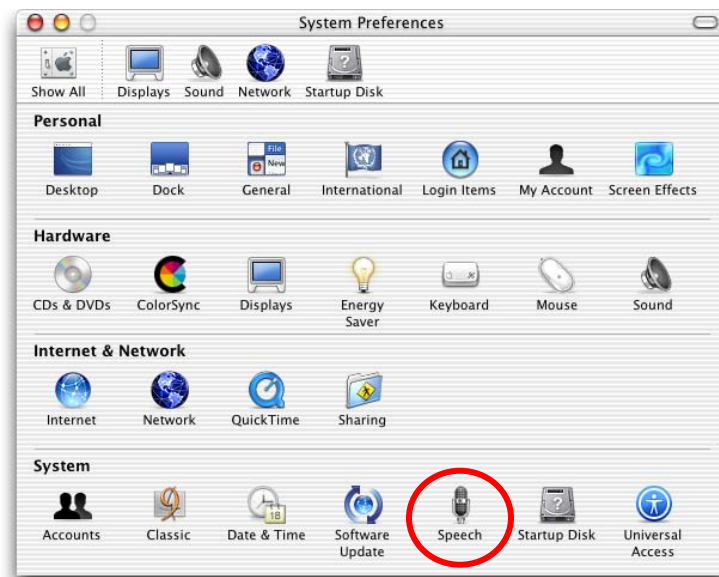
movement for initial delay and maximum speed.

Finally, the user can set the size of the cursor on the screen.

Speech Settings

The MAC OS accessibility options also include Speech features that can assist users in having selected text spoken aloud by an automated voice, or dictate personal text onto a word processing program.

To access the speech options, select the **System Preferences** icon on the main window, and then select the **Speech** icon under the **System** menu.



The Speech options window has two areas that the user can toggle between: **Speech Recognition** and **Text to Speech**.

In the Speech Recognition window, the user can attach or use a built-in microphone on the computer and navigate throughout the programs and applications with spoken commands.

The Speech Recognition option can be turned on either by speaking a keyword, pressing a key while speaking, or having the computer continuously listen to the user's commands.

To train the computer to your own voice, select the calibrate button and go through the given directions to

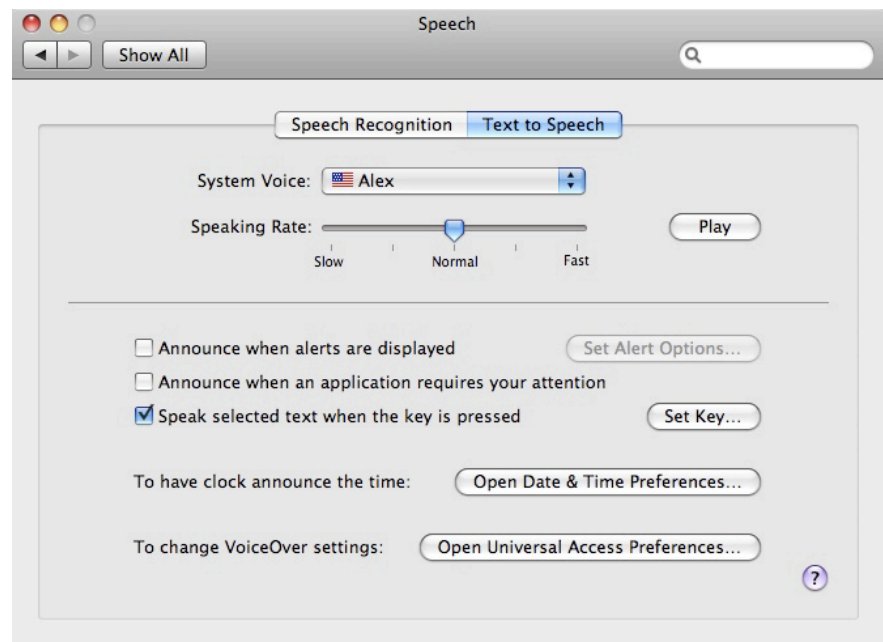


help it recognize your commands more easily.

The user can also have the computer acknowledge his or her spoken commands by playing a sound or speaking the command out loud as it follows the command that the user speaks.

Finally, the user can look up some common commands that are used when navigating through certain applications and programs on the MAC Operating System by selecting the Commands button on the Speech Recognition window.

The **Text to Speech** options allow the user to pick a voice that will read selected text out loud. The user can select from a variety of voices as well as select the speaking rate of the voice that is chosen. The user can also select the chosen voice to announce when alerts are displayed on the computer screen, when an application requires attention, or to speak selected text when a chosen key has been typed. The user can also have the clock announce the time when selected.



Program Manufacturer Contact Info

Company: Apple, Inc.

Contact: accessibility@apple.com

Website: <http://www.apple.com/accessibility/>

Cost: Free; built-in to any Apple computer with the Operating System X